

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000065**Date Inspected:** 13-Jan-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Liu**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Bid 52, 55 Tower and Girder**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright was present as requested to observe quality control functions related to procedure qualification record (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA Inspector observed the continuation welding of a Procedure Qualification (PQR) fillet weld soundness test plate identified as HP-2006138. The HP2006138 test was conducted on A709-50-2 steel, 26mm thick, using Submerged Arc Welding (SAW) 2mm diameter electrode in the 1G (flat) position. The QA Inspector observed ZPMC Quality Control (QC) recording the essential variable (amps, volts, travel speed) for each pass and randomly verified the parameters using an Amprobe® amperage / voltage meter and a stopwatch.

The QA Inspector issued lot number B41-010-07. The welding appeared to comply with the contract documents.

The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the radiographic film of Procedure Qualification (PQR) test plate using Submerged Arc Welding (SAW), using F7A3-EM12K 2.0mm electrode, in the 1G (flat) position. The film appeared to comply with the AWS D1.5, Section 6 requirements.

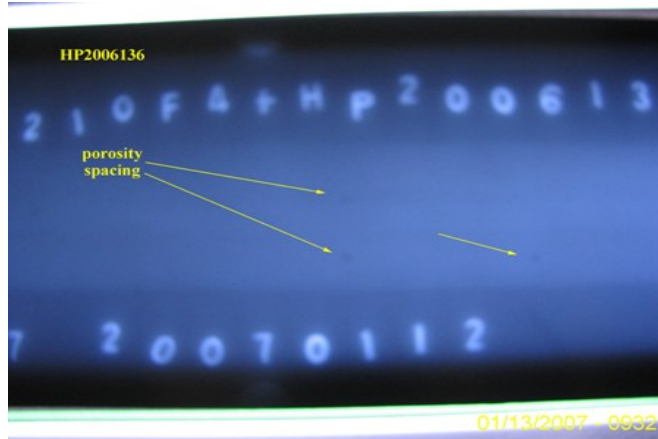
Item	Description	WBS	Dwg No.	Status
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The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the radiographic film for Procedure Qualification (PQR) HP2006136 test plate using Gas Metal Arc Welding (GMAW), using ER70S-6 1.4mm electrode, in the 1G (flat) position with backing bar. The film appeared not to comply with the AWS D1.5, Section 6 requirements due to spacing of porosities in the weld as shown in the photo below.

WELDING INSPECTION REPORT

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The Caltrans Quality Assurance (QA) Inspector was requested to witness the re-welding of Procedure Qualification (PQR) test plate HP2006136-1 using Gas Metal Arc Welding (GMAW), using ER70S-6 1.4mm electrode, in the 1G (flat) position. The welding was performed per the AWS D1.5, Section 5.13 requirements. The welding appeared to comply with the contract documents.

Summary of Conversations:

See Task Leader journal for this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Wright,Mark	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer
